What Is Claimed Is:

1. A method for measuring catalytic activity of a test aliquot, comprising the steps of:

distributing the test aliquot into a separation medium;

processing the test aliquot to produce one or more fragments in the separation medium;

capturing an image of the fragments to measure intensity values from each fragment; and

analyzing said intensity values to determine a catalytic result.

2. A method according to claim 1, wherein said distributing step comprises the step of:

distributing the test aliquot among a plurality of reaction wells within the separation medium, wherein said analyzing step comprises placing said intensity values into intensity profiles, each intensity profile representing fragments from a corresponding reaction well.

3. A method according to claim 2, further comprising the steps of:

removing an intensity value lying outside of a prescribed range; and

refitting said intensity profiles in response to said removing step.

4. A method according to claim 1, further comprising the step of:

calculating intensity ratios, wherein each intensity ratio is derived from an intensity value from each of two specified fragments, wherein said intensity ratios are used to determine said catalytic result.

5. A method according to claim 1, wherein said catalytic result is derived from an effective dilution factor for predicting complete digestion of a fragment.

6. A method according to claim 1, further comprising the step of:

determining a unit call for complete digestion of a fragment.

7. A method according to claim 6, further comprising the step of:

determining a calibration factor for adjusting said catalytic result used to determine said unit call.

8. A method according to claim 1, further comprising the step of:

staining the test aliquot with a reporter molecule prior to said capturing an image step.

9. A method according to claim 8, wherein the test aliquot is not de-stained prior to said capturing an image step.

10. A method according to claim 1, wherein said processing step comprises the step of:

performing electrophoretic separation to resolve at least one of DNA fragments and RNA fragments.

11. A method according to claim 1, wherein said distributing step comprises the step of:

transferring a diluted enzyme concentration to one or more reaction wells within the separation medium to produce the test aliquot, wherein said one or reaction wells contain a DNA substrate.

12. A method according to claim 11, wherein said distributing step further comprises the steps of:

apportioning a buffer solution among a dilution matrix having multiple pre-dilution tubes and multiple dilution tubes;

depositing an enzyme sample into said pre-dilution tubes to produce an enzyme concentration; and

transferring portions of said enzyme concentration from said pre-dilution tubes to said dilution tubes to produce said diluted enzyme concentration.

13. For use with a separation medium for receiving a test aliquot and producing molecular fragments from the test aliquot, and an image capturing device for producing an image of the molecular fragments to measure intensity data from the molecular fragments, a data processing system for measuring endonuclease activity from the test aliquot, comprising:

modeling means for placing the intensity data to a plurality of intensity profiles;

peak integration means for computing an intensity ratio from each intensity profile; and

forecasting means for computing an unit call from said intensity ratios.

14. A system of claim 13, wherein said peak integration means further comprises:

partial band integration means for integrating the intensity data relating to a set of partial bands selected from said plurality of intensity profiles; and

final band integration means for integrating the intensity data relating to a set of final bands selected from said plurality of intensity profiles.

15. A system of claim 13, further comprising:

approximation means for producing a trend from each intensity ratio from said plurality of intensity profiles.

16. A system of claim 15, further comprising:

collocating means for measuring a threshold crossing value from a regression of said trend towards a threshold crossing level, wherein said threshold crossing value determines said unit call.

17. A system of claim 13, further comprising:

calibrating means for adjusting a calibration factor utilized by said forecasting means to compute said unit call.

18. A system of claim 13, further comprising:

normalizing means for removing at least one of outliers and faulty intensity data to correct said intensity profiles.

19. A computer program product comprising a computer useable medium having computer readable program code means embedded in said medium for causing an application program to execute on a computer used to measure endonuclease activity from a test aliquot, said computer readable program code means comprising:

a first computer readable program code means for causing the computer to fit intensity data to a plurality of intensity profiles, wherein said intensity data represent measurements taken from a digital image of molecular fragments produced in the test aliquot;

a second computer readable program code means for causing the computer to derive an intensity ratio from each intensity profile; and

a third computer readable program code means for causing the computer to derive an unit call from said intensity ratios.

20. A computer program product according to claim 19, wherein said second computer readable program code means further comprises:

a fourth computer readable program code means for causing the computer to integrate said intensity data relating to a set of partial bands selected from said plurality of intensity profiles; and

a fifth computer readable program code means for causing the computer to integrate said intensity data relating to a set of final bands selected from said plurality of intensity profiles.

21. A computer program product according to claim 19, further comprising:

a fourth computer readable program code means for causing the computer to produce a trend from each intensity ratio from said plurality of intensity profiles.

22. A computer program product according to claim 21, further comprising:

a fifth computer readable program code means for causing the computer to measure a threshold crossing value from a regression of said trend towards a threshold crossing level, wherein said threshold crossing value determines said unit call.

23. A computer program product according to claim 19, further comprising:

a fourth computer readable program code means for causing the computer to adjust a calibration factor utilized by said third computer readable program code means to derive said unit call.

24. A computer program product according to claim 19, further comprising:

a fourth computer readable program code means for causing the computer to remove at least one of outliers and faulty intensity data to correct said intensity profiles.